

ABSTRACT OF THE DISCLOSURE

A selective and parallel growth method of carbon nanotube for electronic-spintronic device applications which directly grows a carbon nanotube on a wanted position toward a horizontal direction comprises the steps of: forming an
5 insulating film on a board; forming fine patterns of catalyst metal layer including a contact electrode pad on the insulating film, forming a growth barrier layer for preventing vertical growth on upper part of the catalyst metal layer; and directly growing the carbon nanotube between the catalyst patterns.